

# CLAIMS

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1. A method for setting up an active connection for transmitting multimedia-related information between a terminal arrangement and a network device arrangement coupled to a packet-switched data transmission network, comprising the steps of:
    - defining a first protocol stack for the terminal arrangement and a second protocol stack for the network device arrangement, the protocol stacks consisting of layers, for arranging the mutual exchange of information between the terminal arrangement and the network device arrangement,
    - defining an Internet Protocol layer for the transmission of packetized data as a certain layer in the first protocol stack and a certain layer in the second protocol stack so that the defined Internet Protocol layers are peer entities,
    - defining a multimedia messaging transport protocol layer as a certain layer above the Internet Protocol layer in the first and second protocol stacks so that the defined multimedia messaging transport protocol layers are peer entities and
    - exchanging multimedia-related information between the multimedia messaging transport protocol layer in the terminal arrangement and the multimedia messaging transport protocol layer in the network device arrangement through the use of the defined Internet Protocol layers as well as other lower layers in the first and second protocol stacks.
  2. A method according to claim 1, comprising the steps of:
    - conveying a request for activating the exchange of multimedia-related information from the terminal arrangement to the network device arrangement and
    - as a response to said request, conveying from the network device arrangement to the terminal arrangement a response comprising an address for identifying the network device arrangement to the terminal arrangement on the Internet Protocol level.
  3. A method according to claim 2, wherein said step of conveying a request for activating the exchange of multimedia-related information comprises the substeps of:
    - conveying a primary request from the terminal arrangement to a routing device, said primary request comprising, as a substitute to an exact recipient address, a general indication that said primary request is related to the activation of the exchange of multimedia-related information and
    - on the basis of said general indication, conveying from said routing device to the network device arrangement a secondary request.

4. A method according to claim 3, wherein said primary request is an Activate PDP Context Request message comprising:

- a Network Service Access Point Identifier for identifying the PDP context to be activated,
  - a PDP Type value for identifying the protocol as Internet Protocol,
  - a dummy Access Point Name for indicating that said Activate PDP Context Request is related to the activation of the exchange of multimedia-related information,
  - a QoS Requested field for indicating the requested quality of service for the PDP context to be activated and
  - a PDP Configuration Options field for carrying other information related to the PDP context to be activated;
- and said secondary request is a Create PDP Context Request message.

5. A method according to claim 2, wherein said step of conveying a response comprises the substeps of:

- conveying a primary response from the network device arrangement to a routing device, said primary response comprising an address for identifying the network device arrangement to the terminal arrangement on the Internet Protocol level and
- conveying from said routing device to the terminal arrangement a secondary response comprising said address.

6. A method according to claim 5, wherein said primary response is a Create PDP Context Response message comprising a PDP Configuration Options field to convey said address, and said secondary response is a Activate PDP Context Accept message.

7. A method according to claim 1, comprising the step of dynamically allocating an address to the terminal arrangement for identifying the terminal arrangement to the network device arrangement on the Internet Protocol level.

8. A terminal arrangement for exchanging multimedia-related information with a network device arrangement through a packet-switched data transmission network, comprising:

- a radio transceiver block,
- a control entity,
- a user data part

- a decoding/demultiplexing block arranged to separate received signalling information from received user data and to direct the former into the control entity and

5 - an encoding/multiplexing block arranged to take signalling information from the control entity and to multiplex it for transmission with user data coming from the user data part;

wherein the control entity is arranged to:

10 - implement a protocol stack and an Internet Protocol layer for the transmission of packetized data as a certain layer in the protocol stack, for arranging the mutual exchange of information between the terminal arrangement and the network device arrangement,

- implement a multimedia messaging transport protocol layer in the protocol stack and

15 - exchange multimedia-related information between said multimedia messaging transport protocol layer in the protocol stack and the network device arrangement through the use of the Internet Protocol layer as well as other lower layers in the protocol stack.

9. A terminal arrangement according to claim 8, comprising a communication device and a presentation device coupled to said communication device, whereby the control entity consists of parts distributed into said communication device and said presentation device, so that said Internet Protocol layer is implemented in said communication device and said multimedia messaging transport protocol layer is implemented in said presentation device.

25 10. A network device arrangement for exchanging multimedia-related information with a terminal arrangement through a packet-switched data transmission network, comprising:

30 - a transmission unit,  
- a control entity and  
- a data storage;

wherein the control entity is arranged to

35 - implement a protocol stack and an Internet Protocol layer for the transmission of packetized data as a certain layer in the protocol stack for arranging the mutual exchange of information between the network device arrangement and the terminal arrangement,

- implement a multimedia messaging transport protocol layer in the protocol stack and

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